

CLAIMS

1. A method for determining an amount of usage of applications in an LPAR in a computer system and a bill for such usage, said method comprising the steps of:

executing a guest operating system in said LPAR;

said guest operating system dispatching a plurality of applications in said LPAR;

said guest operating system or other program executing in said LPAR determining information indicative of an amount of usage of each of said applications;

based on said information, reporting an amount of usage of each of said applications to a billing function; and

said billing function determining a bill for each of said applications based on said amount of usage of each of said applications.

2. A method as set forth in claim 1 further comprising the step of determining an amount of usage of each of said applications based on said information determined by said guest operating system or said other program executing in said LPAR, and the reporting step reports said amount of usage of each of said applications determined by the step of determining said amount of usage of said applications.

3. A method as set forth in claim 1 further comprising the steps of:

determining an amount of usage of said LPAR based on system data, without using application usage information determined by said guest operating system or said other program;

determining the total usage of all of said applications in said LPAR based on said information determined by said guest operating system or said other program; and

comparing said total usage of all of said applications to an amount of usage of said LPAR based on said system data, to audit said amount of usage of said applications in said LPAR or a charge based on said amount of usage of said applications.

4. A system for determining an amount of usage of applications in an LPAR in said computer system and a bill for such usage, said system comprising:

a guest operating system in said LPAR, said guest operating system dispatching a plurality of applications in said LPAR;

means within said LPAR for determining information indicative of an amount of usage of each of said applications;

means, based on said information, for reporting an amount of usage of each of said applications to a billing function.

5. A system as set forth in claim 4 further comprising said billing function, and wherein said billing function determines a bill for each of said applications based on said amount of usage of each of said applications.

6. A system as set forth in claim 4 further comprising means for determining an amount of usage of each of said applications based on said information determined by the information determining means within said LPAR, and wherein the reporting means reports said amount of usage of each of said applications determined by the step of determining said amount of usage of said applications.

7. A system as set forth in claim 4 further comprising:

means for determining an amount of usage of said LPAR based on system data, without using application usage information determined by said guest operating system or said other program;

means for determining the total usage of all of said applications in said LPAR based on said information determined by said information determining means; and

means for comparing said total usage of all of said applications to an amount of usage of said LPAR based on said system data, to audit said amount of usage of said applications in said LPAR or a charge based on said amount of usage of said applications.

8. A computer program product for determining an amount of usage of applications in an LPAR in a computer system and a bill for such usage, said computer program product comprising:

a computer readable medium;

first program instructions of a guest operating system in said LPAR to dispatch a plurality of applications in said LPAR;

second program instructions of said guest operating system or other program in said LPAR to determine information indicative of an amount of usage of each of said applications;

based on said information, third program instructions to report an amount of usage of each of said applications to a billing function; and

wherein said first, second and third program instructions are recorded on said medium.

9. A computer program product as set forth in claim 8 further comprising fourth program instructions within said billing function to determine a bill for each of said applications based on said amount of usage of each of said applications; and wherein said fourth program instructions are recorded on said medium.

10. A computer program product as set forth in claim 8 further comprising fourth program instructions to determine an amount of usage of each of said applications based on said information determined by said guest operating system or said other program executing in said LPAR; and wherein said fourth program instructions are recorded on said medium.

11. A computer program product as set forth in claim 8 further comprising:

fourth program instructions to determine an amount of usage of said LPAR based on system data, without using application usage information determined by said guest operating system or said other program;

fifth program instructions to determine the total usage of all of said applications in said LPAR based on said information determined by said guest operating system or said other program; and

sixth program instructions to compare said total usage of all of said applications to an amount of usage of said LPAR based on said system data, to audit said amount of usage of said applications in said LPAR or a charge based on said amount of usage of said applications; and wherein said fourth, fifth and sixth program instructions are recorded on said medium.

12. A method for determining an amount of usage of applications in an LPAR in a computer system and a bill for such usage, said computer system including storage private to said LPAR,

storage private to said system and system functions, and storage shared by said LPAR and said system functions, said method comprising the steps of:

executing a guest operating system in said LPAR;

said guest operating system dispatching a plurality of applications in said LPAR, determining information indicative of an amount of usage of each of said applications, and writing said information to said shared storage;

one of said system functions reading said information from said shared storage and reporting information indicative of an amount of usage of each of said applications to a billing function; and

said billing function determining a bill for each of said applications based on the information obtained from said one system function.

13. A method as set forth in claim 12 wherein said guest operating system determines the amount of usage of each of said applications and reports same to said shared storage.

14. A method as set forth in claim 12 wherein said guest operating system calculates the amount of usage of each of said applications using storage private to said LPAR, and then reports same to said shared storage.

15. A method as set forth in claim 12 wherein said one system function processes said information obtained from said shared storage into a different form, and then reports said information in said different form to said billing function.

16. A method as set forth in claim 12 further comprising the steps of:

another of said system functions determining an amount of usage of said LPAR based on system data, without using application usage information generated by said guest operating system;

determining the total usage of all of said applications in said LPAR based on said information from said shared storage; and

comparing said total usage of all of said applications to an amount of usage of said LPAR based on said system data, to audit said amount of usage of said applications in said LPAR or a charge based on said amount of usage of said applications.

17. A method as set forth in claim 16 wherein the step of determining said amount of usage of said LPAR based on said system data is performed by checking usage bits of processors which execute said LPAR.

18. A method as set forth in claim 12 wherein said bill is based on a peak usage.

19. A method for determining an amount of usage of applications in an LPAR in a computer system and auditing such usage, said computer system including storage private to said LPAR, storage private to said system and system functions, and storage shared by said LPAR and said system functions, said method comprising the steps of:

executing a guest operating system in an LPAR;

said guest operating system dispatching a plurality of applications in said LPAR, determining information indicative of an amount of usage of each of said applications, and writing said information to said shared storage;

one of said system functions reading said information from said shared storage;

determining the total usage of all of said applications in said LPAR based on said information from said shared storage;

another of said system functions determining an amount of usage of said LPAR based on system data, without using application usage information generated by said guest operating system;

comparing said total usage of all of said applications in said LPAR to said amount of usage of said LPAR to audit said amount of usage of said applications in said LPAR.

20. A method as set forth in claim 19 wherein the step of determining said amount of usage of said LPAR based on said system data is performed by checking usage bits of processors which execute said LPAR.